Future Challenges for K-12 Education

Overview

Providing adequate funding for public education is difficult in Utah. Although taxpayers pay relatively high taxes, with a large share of that tax revenue dedicated to education, the size of Utah's student population results in the lowest per-pupil funding in the nation. The past ten years brought very favorable conditions to Utah's state and local governments. With a booming economy, tax revenues increased rapidly. Public school enrollment slowed dramatically, and the combination of slow enrollment growth with high revenue growth allowed a greater investment in education, even as the state focused resources in other budget areas, such as infrastructure development. However, the current decade is bringing in a much different socio-economic landscape -- with a formidable enrollment boom, prospects of slower economic growth, and new federal rules that will require a higher level of performance from public schools. These challenges will certainly need the attention of policymakers at all levels of government if Utah's schools are to be able to improve quality, or even just maintain the current level of quality.

Utah's Education Paradox -- High Effort But Low Spending Results

Utahns exercise a significant funding effort for K-12 and higher education, but that effort yields low per-pupil funding because of the unusually large number of children in Utah. One measure of the state's effort for funding government programs is the tax burden. When measured in proportion to statewide personal income, Utah has a high tax burden. In 1998-99 (the most recent year with comparable data on all states), this burden was 15.2% of personal income, ranking ninth highest among the 50 states. Through the 1990s, the tax burden grew in most years, although efforts were made at least at the state level to reduce taxes.

Furthermore, the tax burden is higher at the state level than the local level. Income tax and property tax affect education the most. Utah's individual income tax, which is constitutionally earmarked for public and higher education funding, ranks 16th highest in the nation. Property tax, on the other hand, ranks fairly low compared to other states at 36th highest. This is a local tax, levied by cities, counties, special districts, and school districts.

Utahns have a history of dedicating a large share of tax revenues to education. In the mid-1990s, Utah's budget effort for K-12 schools was among the highest in the nation, ranking fifth highest in 1996. By 1999, however, Utah had fallen below the national average and ranked 32nd. This decline for K-12 education does not mean that schools actually dealt with reductions in their budgets; school budgets continued to grow during this period, but they did not grow as fast as other components of state and local spending. A leveling off of public education enrollment growth in the late 1990s, and the need for the state to dedicate large amounts of money to capital projects, such as highway construction, contributed to this.

Despite this effort, Utah's per-pupil funding has remained the lowest in the country at $4,200 per pupil, and class sizes have remained the highest at 22.1 pupils per teacher. These ratios improved during the 1990s. However other states were increasing per-pupil funding and decreasing class size as well. This is the result of a remarkably young population, which is expected to grow significantly in the coming decade.

Utah's Unique Demographics

According to the 2000 census, Utah has approximately 500,000 residents that are school aged. This is 22.8% of the state's total population, the highest percentage in the nation. When comparing the number of school aged children to the adult working population between the ages of 18-64, Utah again ranks first in the nation. Our dependency ratio is also high. For every 100 working age adults, there are 38.5 children. The state also has the highest fertility rate of any state at 91.4 live births per 1,000 women of childbearing years. Arizona is second, with a considerably lower rate of 78.2 per 1,000 women.

Enrollment projections from the Utah State Office of Education show school enrollments increasing by 102,434 over the period of 2001-2011. This number is approximately even with the enrollment boom of the 1980s, when the student population increased by approximately 101,800 from 1980-1990. This new enrollment boom would be a 21.5% increase over the ten-year period, compared to an almost 30% increase in the 1980s.

Discussions with state demographers reveal that two-thirds of the expected enrollment growth is derived from the natural increase of the state's population. The 70,000 projected students are the direct result of the state's high fertility rate and the number of women in their prime childbearing years. The other 32,000 projected students are anticipated to be the result of migration to Utah from other states. This is where Utah's economic growth becomes critical. If Utah's economy does not outperform neighboring states, the enrollment projections might be overstated.

Utah Foundation calculates that, with moderate in-migration (half the official estimate), if the economy grows slowly (2% real annual growth), state funding per pupil will not be able to keep up with the growth in enrollments, even if a higher level of budget effort is assumed. However, if the economy grows at a moderately fast pace (4.2% real annual growth), state funds will grow sufficiently to increase per-pupil funding from state sources.

Utah's Economy

While there are large numbers of public school children requiring support through tax funds, the state has few resources with which to meet that demand because of its small economy and low wages. According to 2001 personal income figures, Utah has the 35th largest economy in the nation, placing it amidst Arkansas, Mississippi, Nebraska and New Hampshire. However, when that income is divided by the population, Utah drops to 44th in the nation, with a per capita personal income of $24,202. This is also the result of our high dependency ratio. Wages, the largest component of personal income, also highlight the difficulty that Utah has in meeting the demands of the education system. In 2000, the average annual salary in the state was $29,229, placing Utah's workers 32nd in the nation. This wage is about 83% of the national average, a figure which has been in decline since 1981. When adjusted for inflation, average pay did grow in the 1990s, but it did not grow as fast as the national average.

Test Scores

Utah's students have maintained average levels of achievement in most subject areas. Science and writing are exceptions to this trend. In

science, Utah's students have done well on national tests, such as the National Assessment for Educational Progress (NAEP), where fourth graders rank 12th. This routinely above-average performance is bolstered by SAT 9 results, where Utahns score above the 50th percentile routinely. Writing skills have consistently lagged behind the national average. Our eighth graders ranked 24th out of 35 states in 1998 and were five points below the national average. These data offer either encouragement or disappointment, depending on the reader's expectations. Some Utahns, having heard the often-repeated assertion that the state has a highly educated workforce, will view these results as disappointing. Utah's performance on most of these tests is average, not outstanding. On the other hand, those who focus on Utah's low level of per-pupil funding and high class sizes may be encouraged to know that, with the nation's worst funding level, our students do not perform anywhere near the worst in the nation. Utah's students have maintained average levels of achievement.

Economic Growth in This Decade

Once the current recession is over, Utah's economy will recover. However, it is unlikely to grow as it did in the 1990s, when Utahns saw a unique convergence of forces that made this state one of the strongest economies in the nation. The major reasons for this growth were: the significant pent-up demand that was left over from a slow economy in the 1980s; a ripe American corporate climate that resulted in greater investment in Utah; a housing boom that was fueled by healthy growth, and resulted in increasing home values. Finally, while the early 1990s brought a recession to much of the country (especially California), Utah was able to bypass the recession and attract many workers and companies into the state. These factors, which were so prominent in the 1990s boom for Utah, have all but evaporated. During the current recession, consumers have continued to spend at surprising levels. This will not provide the pent-up demand expected at the end of most recessions. Corporate America is no longer growing like it was in the last decade, and some aspects of Utah's attractiveness, such as low property prices, have diminished. Also, the wealth effect of the 1990s is reversing, as investors have lost large sums in the stock market, and some economists are predicting a bursting real estate price "bubble."

No Child Left Behind

Even if the economy grows at a healthy rate and funding is able to keep pace with enrollment growth, new federal rules will place an additional strain on Utah's public education system. On January 8, 2002, President Bush signed into law the *No Child Left Behind* Act of 2001 (NCLB). NCLB aims to increase accountability through emphasis on standards and assessments. Furthermore, it penalizes schools that do not make adequate yearly progress on those assessments.

Two fiscal problems arise from NCLB. First, NCLB was designed as top-down legislation. Utah's State Board of Education has traditionally been of an oversight agency rather than a regulatory one. The regulatory role of Utah's State Board of Education is relatively weak. This reflects Utahns' preference for local control and administration of education. Historically, the state board has only developed recommendations regarding curricula and administration. Eventually, various school districts determine how these recommendations are implemented. This presents some serious organizational difficulties that need to be overcome in order to effectively administer NCLB in Utah. The Utah State Office of Education (USOE) will have to develop the ability to regulate school districts and schools. For example, in the event that a school fails for five consecutive years, it must undergo state restructuring. This will require changes both at the administrative and legislative level.

Furthermore, USOE will need to appoint individuals who will oversee the testing programs associated with NCLB and the disaggregation of data by race, income, and other factors for the purpose of federal reporting. Rather than establish a new division at USOE, NCLB oversight and reporting will be integrated into the existing structure and programs. Finally, a preliminary look at Utah's disaggregated test scores shows that while Utah students perform at or above the national average as a group, most of Utah's racial groups perform below the level of the same racial groups nationally. Additionally, Hispanic students are the fastest growing student group, suggesting that Utah's ethnic mix is about to change significantly. This growth will create a downward pressure on Utah's overall test scores unless the achievement gap between minorities and white students is lowered significantly. This downward pressure will make it difficult to comply with NCLB, which is linked to federal funding and creates another fiscal pressure for Utah's education system.

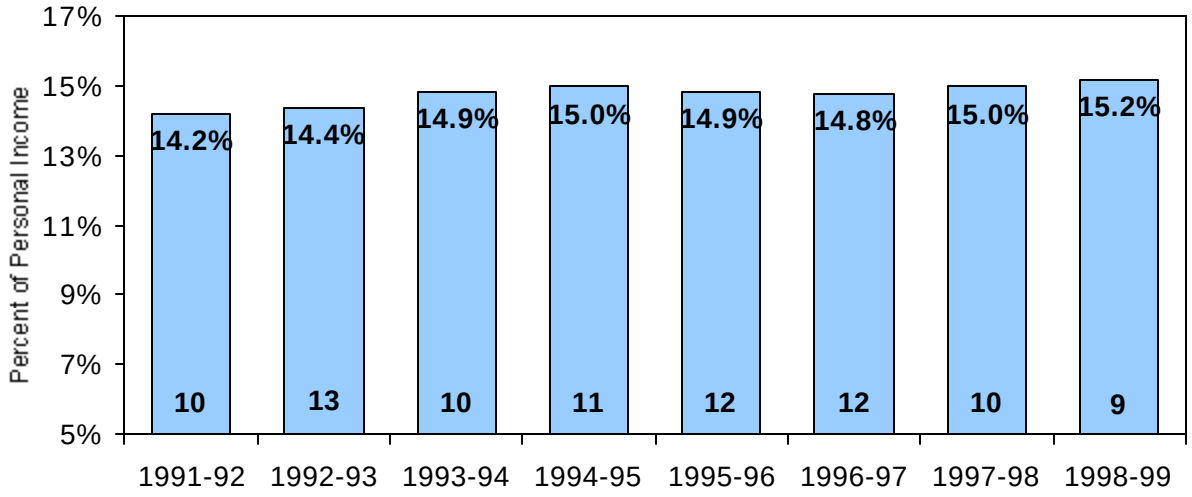
Conclusion

Utahns exert a significant funding effort for K-12 and higher education. While Utah's budget effort on K-12 education had been among the highest in the nation, it fell in the 1990s. Since K-12 enrollment growth was flat for much of the 1990s, and economic growth brought strong revenue increases, this change in funding priorities did not harm per-pupil funding, which increased at a healthy rate. Along with the rise in per-pupil spending, class size was reduced. Now that enrollment growth is accelerating and the economy will likely grow at a slower pace, a reassessment of spending priorities may be needed to keep K-12 education funded at an adequate level. However, it appears that the most important factor in determining whether per-pupil funding will grow is the rate of economic growth. If the economy is reasonably strong and the state's K-12 budget effort is maintained at recent levels, per-pupil funding will increase even with rapid enrollment growth.

Utah currently ranks in the middle tier in student performance on standardized tests. Increasing minority populations, which have greater prevalence of low income, lower levels of parental education, and English language challenges will bring Utah's test scores below average unless educators can succeed in bridging the achievement gaps for minorities. New federal requirements in the *No Child Left Behind* legislation will require extraordinary effort by Utah's public education system to keep Utah schools from being classified as failing. It is not clear whether Utah's public education system is prepared to succeed under the new law. Some structural changes may be needed, including strengthening the authority of the State Board of Education so that it can provide the oversight of local schools envisioned in the new federal law.

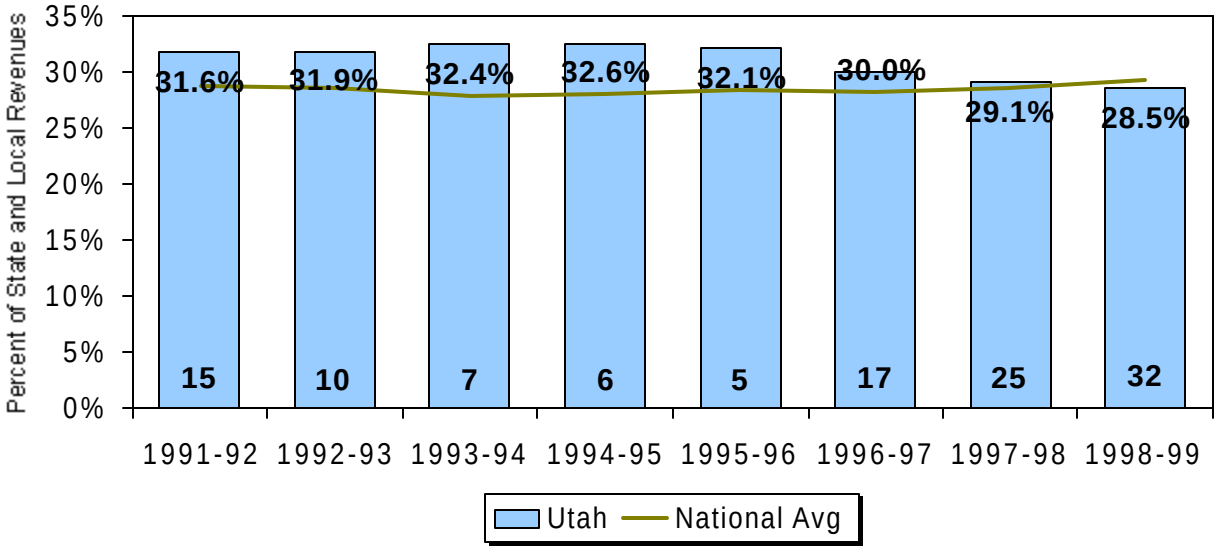
The challenges of the coming ten years will require thoughtful attention of policymakers at all levels of government. This decade will not provide the favorable environment that existed in the 1990s, and concerted effort will be required to ensure that Utah meets these challenges and succeeds.

Figure 77
Utah's Tax Burden: State and Local Taxes and Fees as a Percent of Personal Income (National Rank Shown at Bottom of Bars)



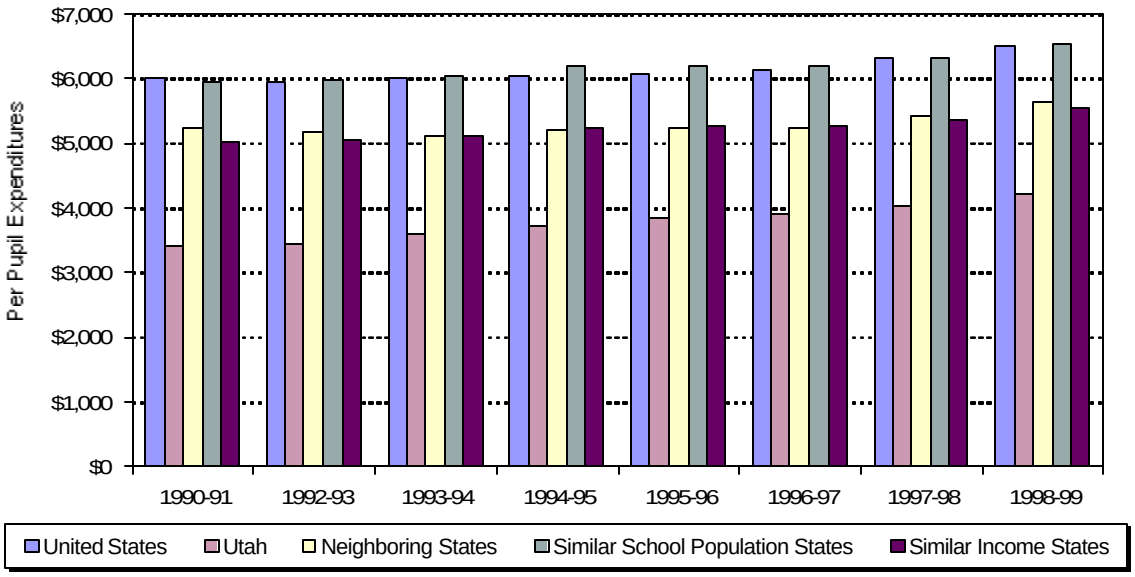
Sources: U.S. Census Bureau, Bureau of Economic Analysis, and Utah Foundation

Figure 78
Utah K-12 Education Spending As a Percent of Total State and Local Own-Source Revenues (National Rank Shown at Bottom of Bars)



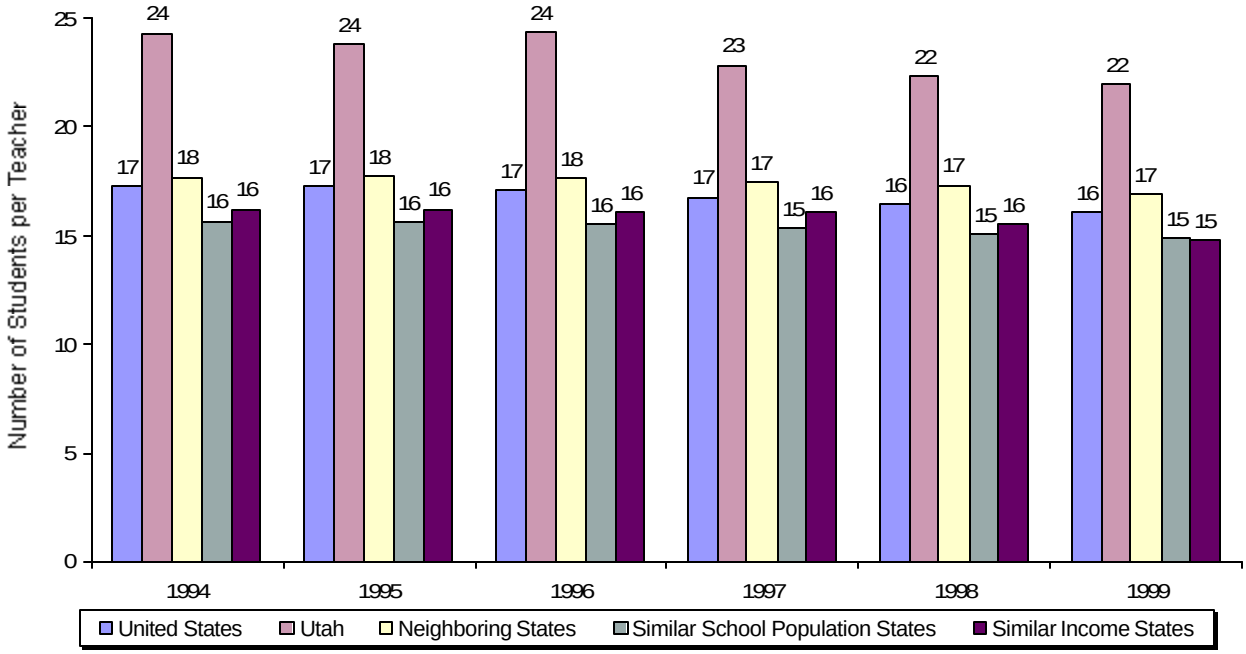
Source: U.S. Census Bureau

Figure 79
K-12 Public Education Per Pupil Expenditures in 1999 Dollars for Utah, its Cohort States and the U.S.: 1990-1999



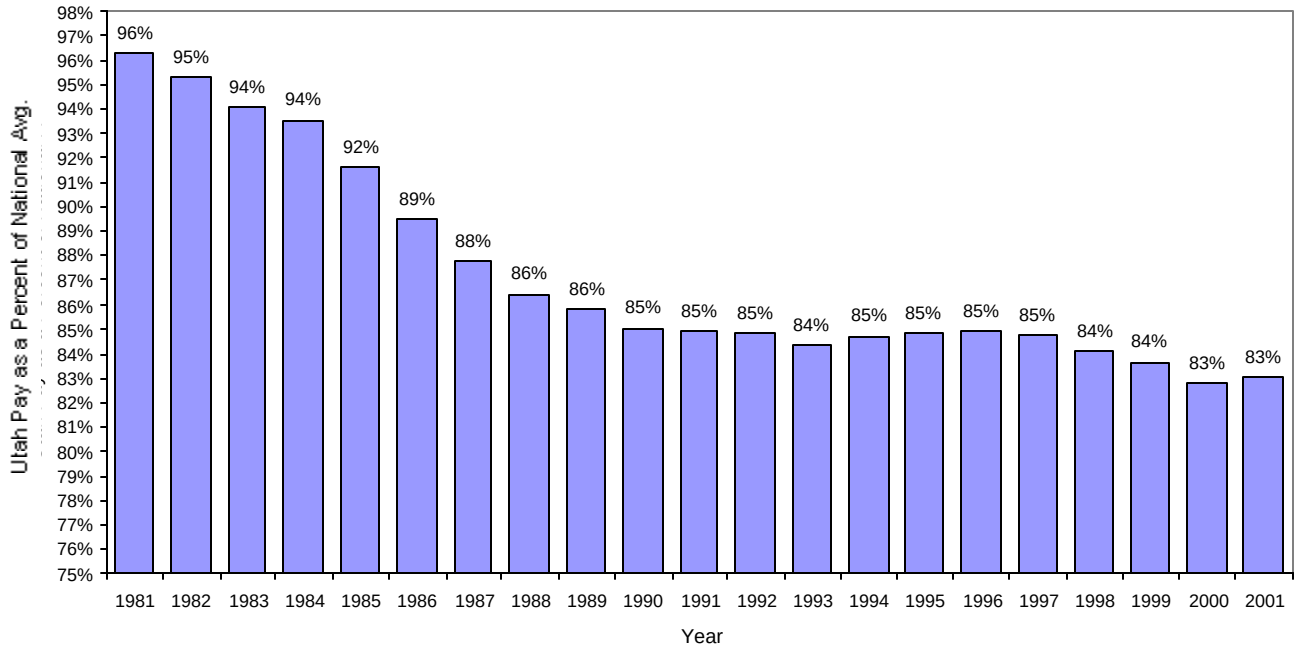
Source: National Center for Education Statistics

Figure 80
K-12 Public School Pupil Teacher Ratios for Utah, its Cohort States and the U.S.: 1994-1999



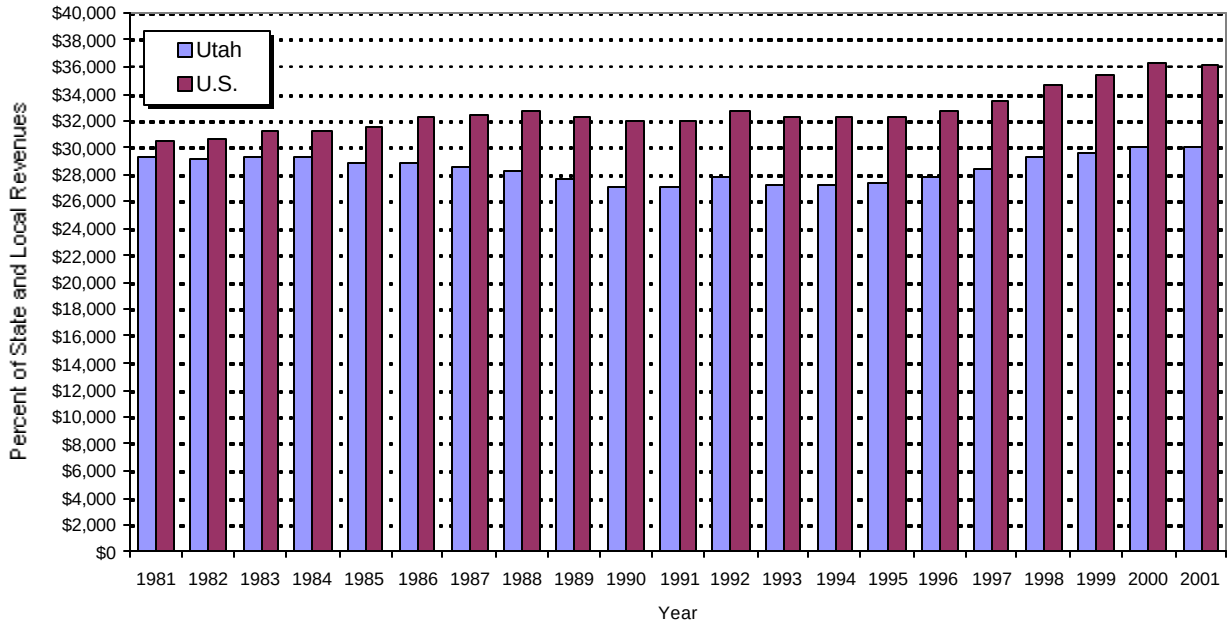
Source: National Center for Education Statistics

Figure 81
Utah Average Annual Pay as a Percent of the U.S. Average: 1981-2001



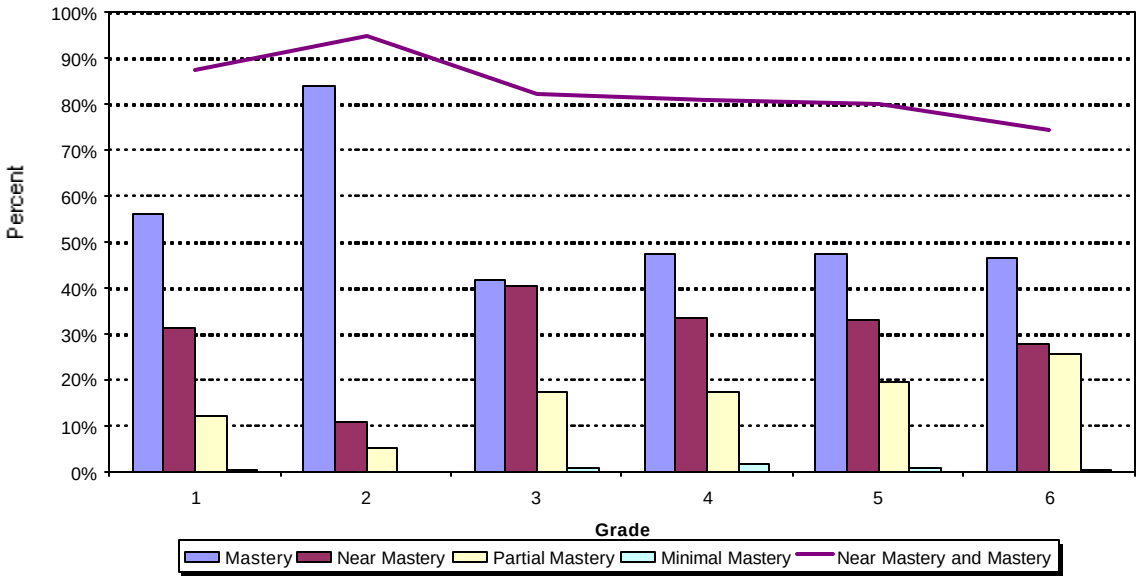
Sources: Bureau of Labor Statistics, Governor's Office of Planning and Budget, Utah Foundation

Figure 82
Average Annual Pay: Utah & the U.S. (adjusted for inflation in 2001 dollars): 1981-2001



Sources: Bureau of Labor Statistics, Governor's Office of Planning and Budget

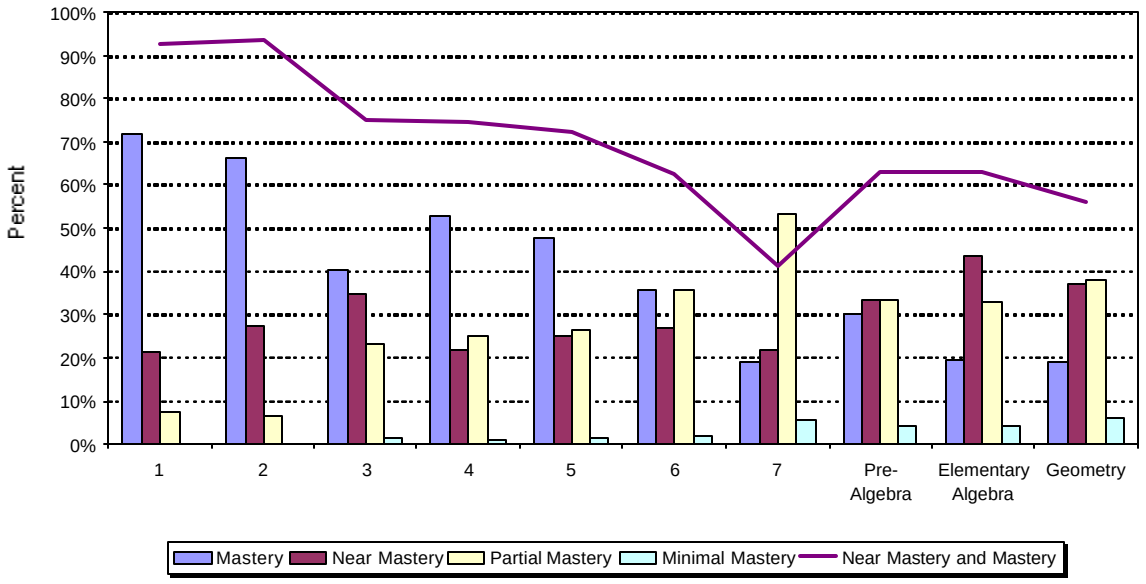
Figure 83
CRT* Statewide Language Arts Results by Grade: 2001



* Core Reference Criterion Test

Source: Utah State Office of Education

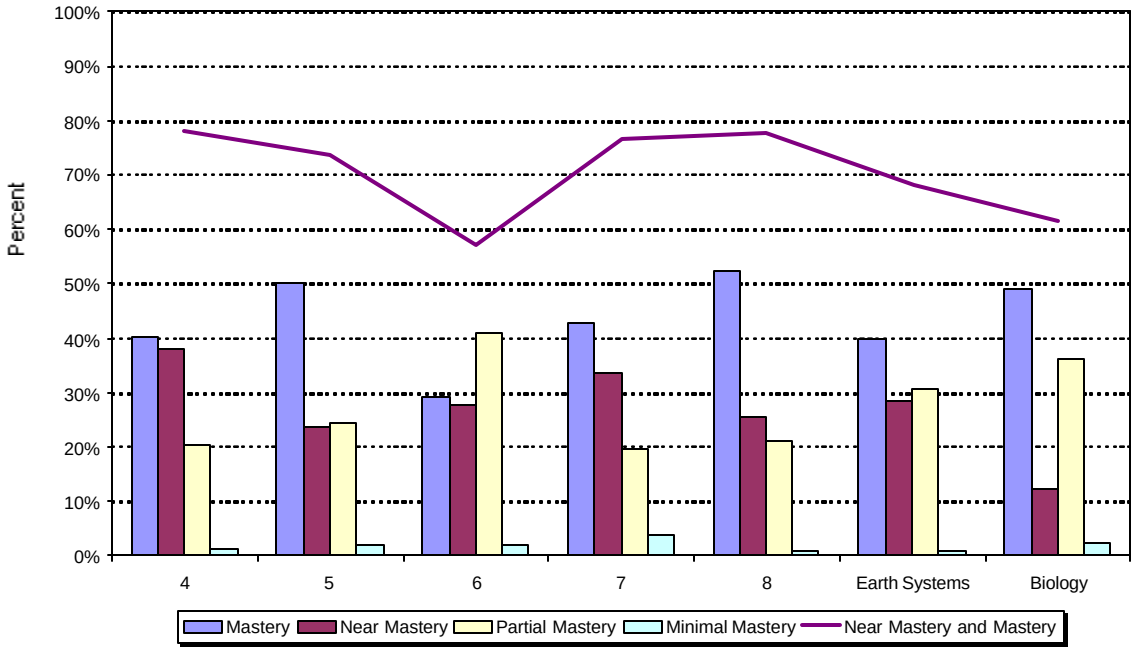
Figure 84
CRT* Statewide Math Results by Grade/Subject: 2001



* Core Reference Criterion Test

Source: Utah State Office of Education

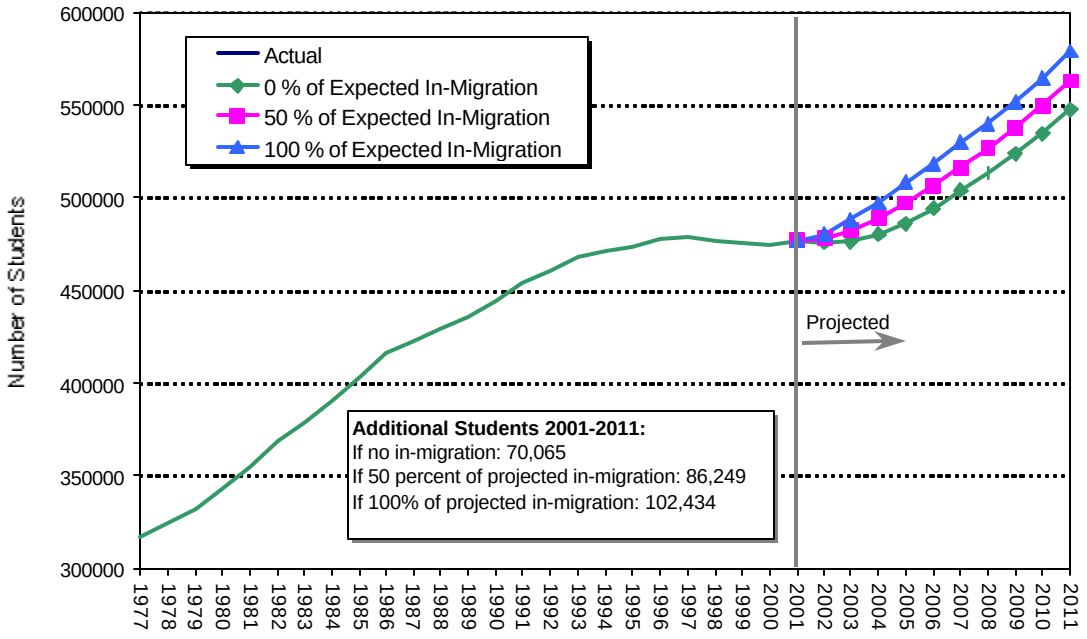
Figure 85
CRT* Statewide Science Results by Grade: 2001



* Core Reference Criterion Test

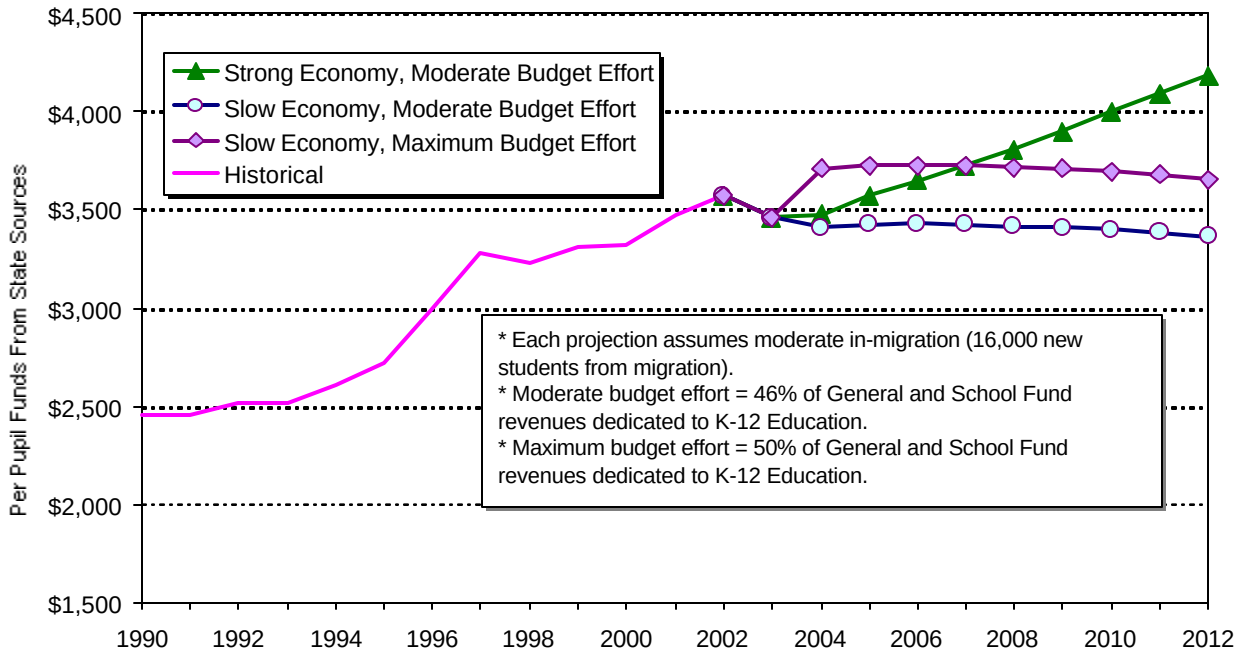
Source: Utah State Office of Education

Figure 86
Utah K-12 Public Education Enrollment, Actual and Projected: 1977-2001



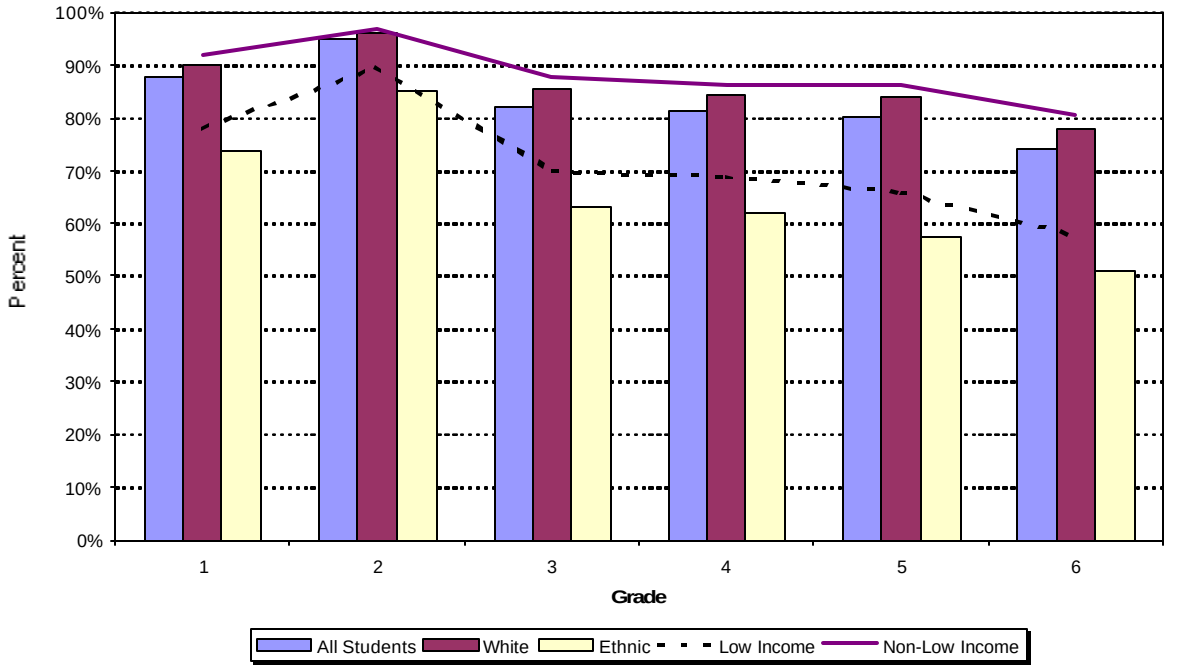
Source: Utah State Office of Education

Figure 87
K-12 Real Operating Funds Per Pupil From State Sources Projected With Varying Economic and Budget Assumptions



Sources: Utah State Office of Education, Bureau of Economic and Business Research, Governor's Office of Planning and Budget, Utah Foundation

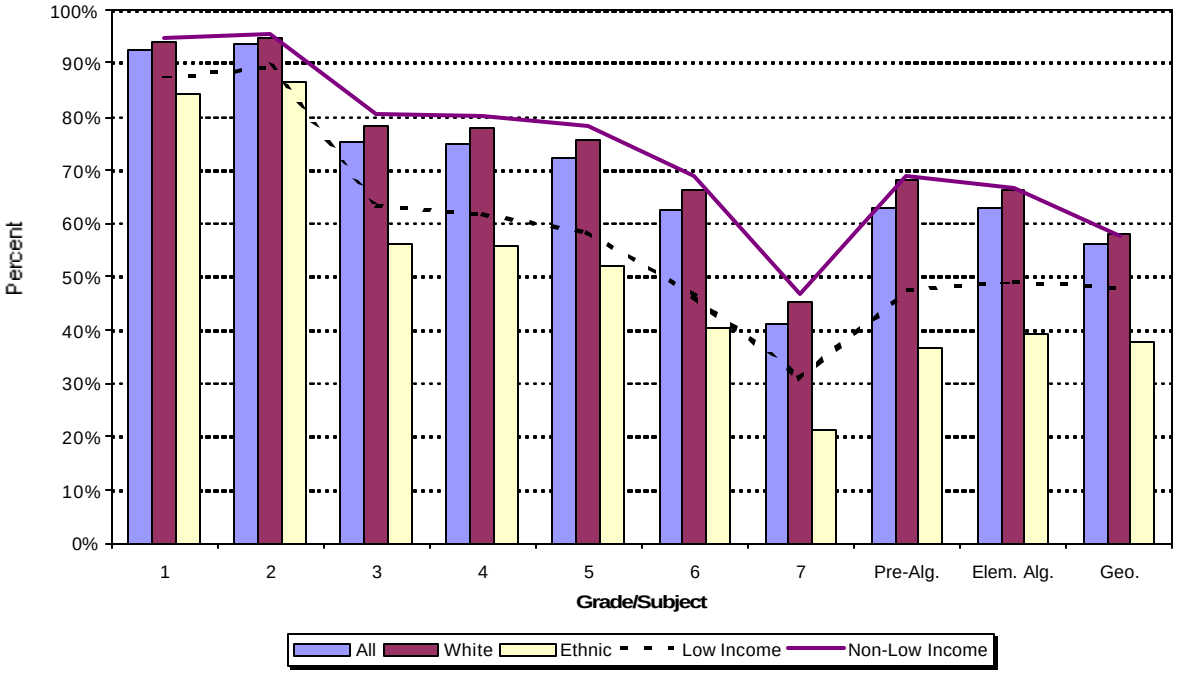
Figure 88
CRT* Statewide Language Arts Percent of Students At or Above Near Mastery by Ethnicity, Income Level & Grade: 2001



* Core Reference Criterion Test

Sources: Utah State Office of Education, Bureau of Economic and Business Research, Governor's Office of Planning and Budget, Utah Foundation

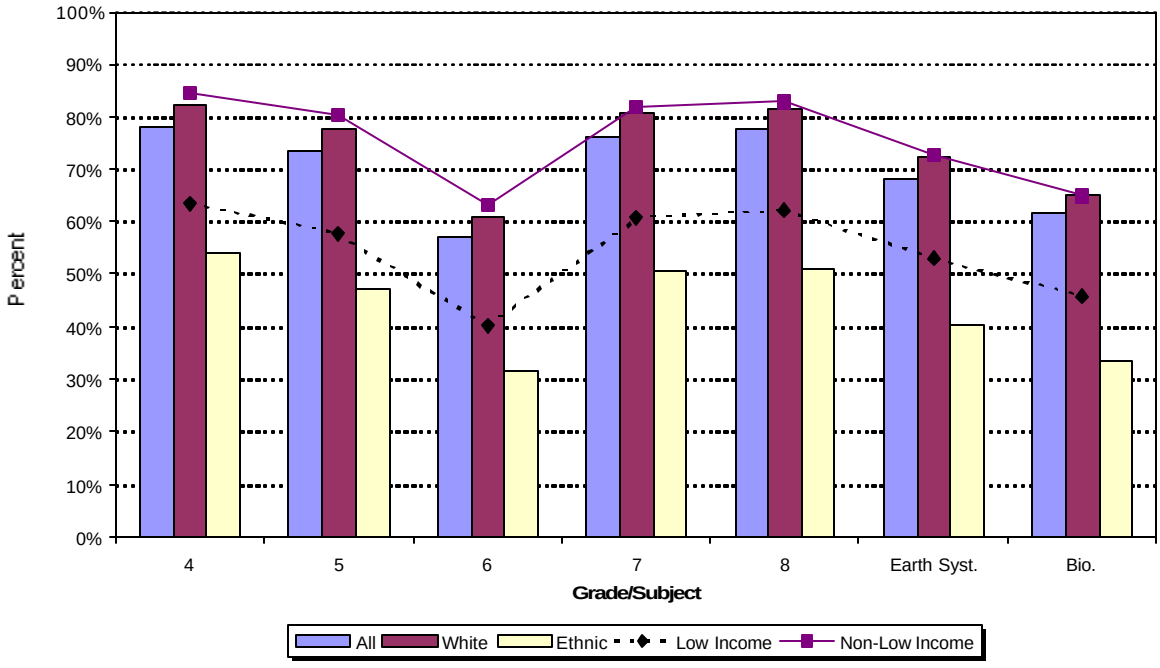
Figure 89
CRT* Statewide Math Percent of Students At or Above Near Mastery by Ethnicity, Income Level & Grade: 2001



* Core Reference Critereon Test

Source: Utah State Office of Education

Figure 90
CRT* Statewide Science Percent of Students At or Above Near Mastery by Ethnicity, Income Level & Grade: 2001



* Core Reference Critereon Test

Source: Utah State Office of Education

Table 91
Tax Burden by Type of Tax

Tax	Utah	U.S. Avg	Utah % of U.S.	Utah Rank
All Taxes & Fees	15.22%	13.51%	113%	9
Individual Income Tax	3.05%	2.49%	122%	16
Corporate Income Tax	0.38%	0.45%	84%	25
General Sales Tax	3.68%	2.64%	139%	8
Property Tax	2.48%	3.16%	79%	36
Other Taxes	1.82%	2.00%	91%	37
Fees	3.82%	2.78%	138%	10

Sources: U.S. Census Bureau, Bureau of Economic Analysis, and Utah Foundation.

Table 92
Utah's NAEP Results by Subject, Grade, and Year

Test	UT Score	U.S. Avg.	UT Rank	Number of States Participating
4th Math 2000	227	226	18	40
8th Math 2000	275	274	21	39
4th Science 2000	155	148	12	39
8th Science 2000	155	149	14	38
8th Writing 1998	143	148	24	36
4th Reading 1998	220	215	10	33
8th Reading 1998	265	261	11	35

Source: "Nation's Report Card," various years, National Center for Education Statistics (NCES).

Table 93
Demographic Indicators of Utah's School Age Population: 2000

State	Median Age 4/1/00	Rank Youngest to Oldest	Fertility Rate (# of Live Births per 1,000 Women Ages 15-44)	Rank Highest to Lowest	% of the Population 0-5 Years of Age	Rank Highest to Lowest	% of the Population 5-17 Years of Age	Rank Highest to Lowest	Shool-Age Dependency Ratio	Rank Highest to Lowest
Alabama	35.8	25	63.2	26	6.7%	26	18.6%	30	30.2	26
Alaska	32.4	3	73.1	5	7.6%	3	22.8%	2	35.7	2
Arizona	34.2	9	78.2	2	7.5%	5	19.1%	17	31.7	14
Arkansas	36.0	29	67.5	13	6.8%	18	18.6%	32	30.7	23
California	33.3	5	70.7	8	7.3%	6	20.0%	9	32.1	11
Colorado	34.3	10	67.2	14	6.9%	15	18.7%	28	28.9	40
Connecticut	37.4	44	61.3	33	6.6%	33	18.1%	38	29.5	32
Delaware	36.0	29	61.2	35	6.6%	32	18.2%	35	29.3	35
Florida	38.7	49	65.1	20	5.9%	47	16.9%	49	28.3	45
Georgia	33.4	6	67.2	14	7.3%	8	19.2%	16	30.1	27
Hawaii	36.2	34	69.6	9	6.5%	37	17.9%	44	28.8	42
Idaho	33.2	4	72.3	6	7.5%	4	21.0%	3	34.8	3
Illinois	34.7	12	68.3	11	7.1%	12	19.0%	20	30.8	22
Indiana	35.2	14	64.3	23	7.0%	14	18.9%	22	30.7	23
Iowa	36.6	40	61.4	32	6.4%	38	18.7%	29	31.1	19
Kansas	35.2	14	67.1	16	7.0%	13	19.5%	12	32.4	9
Kentucky	35.9	26	61.6	31	6.6%	31	18.0%	42	28.7	43
Louisiana	34.0	8	66.7	17	7.1%	11	20.2%	6	33.1	7
Maine	38.6	48	49.7	49	5.5%	50	18.1%	41	29.1	37
Maryland	36.0	29	60.1	39	6.7%	25	18.9%	23	30.0	29
Massachusetts	36.5	39	58.5	42	6.3%	41	17.3%	48	27.6	49
Michigan	35.5	21	60.4	38	6.8%	20	19.3%	15	31.4	16
Minnesota	35.4	19	61.8	30	6.7%	23	19.5%	11	31.6	15
Mississippi	33.8	7	68.3	11	7.2%	9	20.1%	7	33.2	6
Missouri	36.1	33	62.9	28	6.6%	28	18.9%	24	31.0	21
Montana	37.5	45	59.0	41	6.1%	45	19.4%	14	31.8	13
Nebraska	35.3	16	65.2	19	6.8%	17	19.5%	13	32.4	9
Nevada	35.0	13	77.9	3	7.3%	7	18.3%	34	28.9	40
New Hampshire	37.1	43	52.3	48	6.1%	43	18.9%	25	30.0	29
New Jersey	36.7	41	64.3	23	6.7%	22	18.1%	39	29.2	36
New Mexico	34.6	11	72.2	7	7.2%	10	20.8%	4	34.5	4
New York	35.9	26	63.9	25	6.5%	34	18.2%	37	29.1	37
North Carolina	35.3	16	66.6	18	6.7%	21	17.7%	46	27.8	48
North Dakota	36.2	34	58.3	44	6.1%	42	18.9%	26	31.3	17
Ohio	36.2	34	61.2	35	6.6%	27	18.8%	27	30.6	25
Oklahoma	35.5	21	69.0	10	6.8%	16	19.1%	19	31.3	17
Oregon	36.3	38	64.7	22	6.5%	36	18.2%	36	29.1	37
Pennsylvania	38.0	47	56.9	46	5.9%	46	17.9%	45	29.5	32
Rhode Island	36.7	41	57.5	45	6.1%	44	17.5%	47	28.3	45
South Carolina	35.4	19	61.3	33	6.6%	29	18.6%	33	29.7	31
South Dakota	35.6	23	65.1	20	6.8%	19	20.0%	8	34.0	5
Tennesse	35.9	26	63.1	27	6.6%	30	18.0%	43	28.6	44
Texas	32.3	2	76.2	4	7.8%	2	20.4%	5	33.0	8
Utah	**27.1**	**1**	**91.4**	**1**	**9.4%**	**1**	**22.8%**	**1**	**38.5**	**1**
Vermont	37.7	46	49.1	50	5.6%	49	18.6%	31	29.5	32
Virginia	35.7	24	59.1	40	6.5%	35	18.1%	40	28.2	47
Washington	35.3	16	62.3	29	6.7%	24	19.0%	21	30.1	27
West Virginia	38.9	50	53.7	47	5.6%	48	16.7%	50	26.7	50
Wisconsin	36.0	29	58.5	42	6.4%	39	19.1%	18	31.1	19
Wyoming	36.2	34	60.9	37	6.3%	40	19.8%	10	31.9	12

Source: US Census Bureau, Census 2000. Calculations by Utah Foundation.